

US Application No. 09/700,821

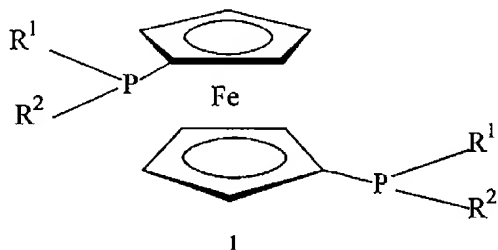
Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

CLAIMS

1. (Currently Amended) A supported catalyst suitable for the hydrogenation of aldehyde, and alkene or an alkyne comprising a cationic rhodium(I) complex of a diphosphine ligand of the formula

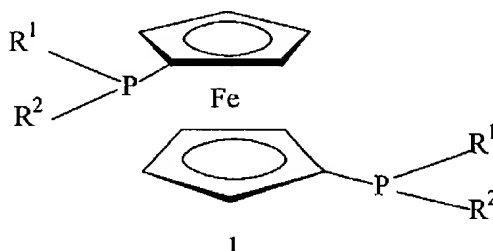


wherein R^1 and R^2 are the same or different hydrocarbon groups of up to 30 C-carbon atoms or R^1 and R^2 are linked to form a ring, and a heterogeneous support medium that provides anionic binding sites comprising a cation exchange resin containing sulphonic acid groups $-SO_3X^+$ wherein X^+ is a proton or any other exchangeable cation.

2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Currently Amended) The catalyst according to claim 1, wherein the support medium comprises an oxide selected from the group consisting of alumina, silica, titania, lanthana, zeolites and clays.

US Application No. 09/700,821

7. (Currently Amended) The catalyst according to claim 6, wherein the metal oxide is alumina.
8. (Canceled)
9. (Currently Amended) The catalyst according to claim 8, wherein the cation exchange resin is a tetrafluoroethylene-perfluoro(vinyl ether sulfonate) copolymer.
10. (Previously Amended) The catalyst according to claim 1, wherein R^1 and R^2 are each an alkyl group.
11. (Previously Amended) The catalyst according to claim 10, wherein $R^1 = R^2 = i\text{-Pr}$.
12. (Currently Amended) A process of hydrogenating an aldehyde to produce the corresponding primary alcohol wherein said process utilizes a supported catalyst comprising a cationic rhodium (I) complex of a diphosphine ligand of the formula



wherein R^1 and R^2 are the same or different hydrocarbon groups of up to 30 carbon atoms, or R^1 and R^2 are linked to form a ring, and a heterogeneous support medium that provides anionic binding sites.

13. (Currently Amended) The process according to claim 12, wherein substrate conversion of at least 90% is effected, and wherein the aldehyde also contains at least one sulfide group that is retained in the product.

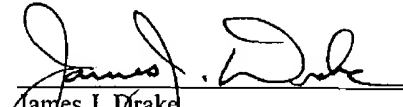
14. (Canceled)

US Application No. 09/700,821

REMARKS/ARGUMENTS

Applicants have made the foregoing amendments in order to make the amendments of Applicants' April 28, 2004 response consistent with the claim amendments made in the Preliminary Amendment dated November 20, 2000. Accordingly, Applicants believe that the claims, as amended, are now in condition for allowance and respectfully request allowance of the pending claims.

Respectfully submitted,


James J. Drake
Registration No. 34,584
Phone: (989) 636-8449

P. O. Box 1967
Midland, MI 48641-1967

JJD/maw